

PATENT

Atty Docket No.: 200312030-1

App. Ser. No.: 10/614,856

IN THE CLAIMS:

Please find a listing of the claims below, with the statuses of the claims shown in parentheses. This listing will replace all prior versions, and listings, of claims in the present application.

What is claimed is:

1. (Original) A system for managing inventory of components in a room, said system comprising:
 - an identification device configured to communicate identification information relating to an associated component;
 - a reader device configured to substantially autonomously receive the identification information from the identification device;
 - means for identifying the locations of the identification devices; and
 - a controller configured to communicate with the reader device and compile the identification information received from the reader device and the locations of the identification devices to maintain an inventory of the components.
2. (Original) The system according to claim 1, further comprising:
 - a memory accessible by said controller, wherein said controller is configured to store the identification information and the locations of the identification devices in the memory.
3. (Original) The system according to claim 1, wherein the components comprise electronic devices for use in data centers.

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4. (Original) The system according to claim 1, wherein the identification devices comprise labels affixable to the components, said labels having identifying indicia displayed thereon.

5. (Original) The system according to claim 4, wherein the identifying indicia comprises at least one of text, barcode, or a display on a screen.

6. (Original) The system according to claim 1, wherein the identification devices comprise relatively distinctive identifying characteristics, said characteristics comprising at least one of color, composition, and style.

7. (Original) The system according to claim 1, further comprising:
a data transmitting device configured to transmit data to the identification devices;
and
wherein the identification devices comprise electronic apparatuses configured to receive data from the data transmitting device.

8. (Original) The system according to claim 1, wherein the reader device comprises at least one of an imaging device, an infrared reader, and an apparatus configured to wirelessly communicate with the identification devices.

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9. (Original) The system according to claim 1, wherein the reader device comprises an information gathering device located on at least one of a wall, ceiling, or floor of the room.

10. (Original) The system according to claim 1, further comprising:
a robotic device having a movable arm and being configured to travel through the room, wherein the reader device is attached to the movable arm of the robotic device.

11. (Original) The system according to claim 1, wherein the means for identifying the locations of the identification devices comprises labels affixed at various positions of the room, said labels including indicia identifying the locations of the labels.

12. (Original) The system according to claim 1, wherein the means for identifying the locations of the identification devices comprises location aware devices configured to determine their locations with respect to other location aware devices and to a fixed reference point.

13. (Original) A method for managing inventory of components in a room, said method comprising:

providing identification devices;

positioning the identification devices in the vicinities of respective ones of the components;

associating the identification devices with respective ones of the components;

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obtaining identification information from the identification devices with a reader device configured to operated in a substantially autonomous manner;
determining locations of the components;
creating a correlation between the identification information and the locations of the components; and
storing the correlation in a memory.

14. (Original) The method according to claim 13, wherein the step of positioning the identification devices comprises affixing the identification devices onto respective ones of the components.

15. (Original) The method according to claim 13, wherein the step of associating the identification devices comprises placing identifying indicia in the form or at least one of text and barcode on the identification devices.

16. (Original) The method according to claim 13, wherein the step of associating the identification devices comprises transmitting identifying information to the identification devices.

17. (Original) The method according to claim 13, wherein the step of obtaining identification information from the identification devices comprises implementing at least one of a reader device configured to image identifying indicia on the identification devices

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and a reader device configured to electronically receive identifying information from the identification devices.

18. (Original) The method according to claim 17, further comprising:
implementing a robotic device having a movable arm, said reader device being attached to the movable arm wherein said reader device is movable into various positions to obtain identification information from identification devices located at various locations in the room.

19. (Original) The method according to claim 18, further comprising:
maneuvering the robotic device to travel to various locations in the room to obtain identification information from identification devices located at various locations in the room.

20. (Original) The method according to claim 18, further comprising:
storing a map of the room in a memory of the robotic device; and
wherein the step of determining the locations of the components comprises determining the location of the robotic device in relation to the map stored in the memory.

21. (Original) The method according to claim 17, further comprising:
positioning the reader device on at least one of a floor, wall, or ceiling of the room; and
articulating the reader device to obtain information from components located at various locations of the room.

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22. (Original) The method according to claim 13, wherein the step of determining locations of the components comprises obtaining location information from one or more labels located in the room.

23. (Original) The method according to claim 13, wherein the step of determining locations of components comprises implementing location aware devices.

24. (Original) The method according to claim 13, wherein the step of creating a correlation between the identification information and the locations of the components comprises creating a correlation in the form of at least one of graphically, a map, a chart, and a table.

25. (Original) The method according to claim 13, further comprising:
determining whether a change in configuration in the room has been detected; and
determining whether a new identification device is required in response to a determination of a change in configuration in the room.

26. (Original) The method according to claim 25, further comprising:
preparing and associating the new identification device in response to a determination of a change in configuration in the room; and
updating the stored correlation between the identification information and the locations of the components.

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27. (Original) The method according to claim 25, further comprising:
obtaining identification information from one or more of the identification devices; and
updating the stored correlation between the identification information and the locations of the components.

28. (Original) A system for managing inventory in a room, said system comprising:
means for providing identification devices;
means for positioning the identification devices in the vicinities of respective ones of the components;
means for associating the identification devices with respective ones of the components;
means for obtaining identification information from the identification devices with a reader device configured to operate in a substantially autonomous manner;
means for determining locations of the components;
means for creating a correlation between the identification information and the locations of the components; and
means for storing the correlation in a memory.

29. (Original) The system according to claim 28, wherein the means for positioning the identification devices comprises means for affixing the identification devices onto respective ones of the components.

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30. (Original) The system according to claim 28, wherein the means for obtaining identification information from the identification devices comprises means for implementing at least one of a reader device configured to image identifying indicia on the identification devices and a reader device configured to electronically receive identifying information from the identification devices

31. (Original) The system according to claim 28, further comprising:
means for maneuvering the reader device around the room to obtain identification information from the components.

32. (Original) A computer readable storage medium on which is embedded one or more computer programs, said one or more computer programs implementing a method for managing inventory of components in a room, said one or more computer programs comprising a set of instructions for:

- providing identification devices;
- positioning the identification devices in the vicinities of respective ones of the components;
- associating the identification devices with respective ones of the components;
- obtaining identification information from the identification devices with a reader device configured to operate in a substantially autonomous manner;
- determining locations of the components;
- creating a correlation between the identification information and the locations of the

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components; and

storing the correlation in a memory.

33. (Original) The computer readable storage medium according to claim 32, said one or more computer programs further comprising a set of instructions for: implementing at least one of a reader device configured to image identifying indicia on the identification devices and a reader device configured to electronically receive identifying information from the identification devices.

34. (Original) The computer readable storage medium according to claim 32, said one or more computer programs further comprising a set of instructions for: implementing a robotic device having a movable arm, said reader device being attached to the movable arm, wherein said reader device is movable into various positions to obtain identification information from identification devices located at various locations in the room.

35. (Original) The computer readable storage medium according to claim 34, said one or more computer programs further comprising a set of instructions for: maneuvering the robotic device to travel to various locations in the room to obtain identification information from identification devices located at various locations in the room.

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36. (Original) The computer readable storage medium according to claim 32, said one or more computer programs further comprising a set of instructions for: articulating the reader device to obtain information from components located at various locations of the room.